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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,266	05/20/2004	Dominik J. Schmidt	IVT.0033US	4584

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TROP PRUNER & HU, PC
1616 S. VOSS ROAD, SUITE 750
HOUSTON, TX 77057-2631

EXAMINER

PHAN, DEAN

ART UNIT	PAPER NUMBER
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2182

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/690,266

Applicant(s)

SCHMIDT, DOMINIK J.

Examiner

Dean Phan

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 20 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 05/16/2005
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1, 16-17, 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Hammond (U.S Pat# 5,638,525).

As to claim 1, an integrated circuit (F. 4) capable of supporting a plurality of host processor families comprising:

a host processor (F.4 execution unit 434) belonging to a first processor family (c.4 I. 50-60, c. 13 I. 30-47; *The execution unit 434 belongs to RISC processor family*);

a reconfigurable processor core (F.4 elements 432-435 & 436-439; *The processor core has ability to execute different applications for specific problems*) coupled to the host processor (F.4 execution unit 434), the reconfigurable processor core having a core portion (F. 4 execution unit 438) configured to process instructions belonging to a second host processor family (c. 4 I. 50-60, c. 13 I. 30-47; *The execution unit 438 is able to process CISC instructions from CISC processor family*); and

a processor type select circuit (F.4 instructional set mode selector state machine 430) to configure the integrated circuit to process instructions belonging to one of the first or second host processor family instruction set (c. 13 I. 30-47).

As to claims 16-17, all same elements of Claim 1 are listed, but in system form rather than method form. Therefore, the supporting rationale of the rejection to Claim 1 applies equally as well to Claims 16-17.

As to claim 19, all same elements of claim 16 are above with further the host processor and the reconfigurable processor core are integrated in a single integrated circuit (F.4 single processor 104).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2-3 are rejected under 35 U.S.C. 103(a) as being obvious in the view of Hammond (U.S Pat# 5,638,525).

As to claim 2, 3, all limitations are listed in claim 1 with the first processor family is a RISC processor, instead of ARM/MIPS. However, ARM/MIPS processor family has an equivalent structure known in the art. Therefore, because these two were art-recognized equivalences at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute for improving the compatibility of the circuit.

Claim 4-15, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hammond (U.S Pat# 5,638,525), in the view of Schmidt (U.S 2002/0128037).

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As to claim 4, Hammond teaches the circuit in claim 1 with a digital portion integrated on the substrate including the host processor (F.4 execution unit 434) and the reconfigurable processor core (F.4, c. 4 l. 46-60) but does not teach the circuit comprises a analog portion integrated on a substrate, the analog portion including: a cellular radio core; a radio sniffer coupled to the cellular radio core; a short range wireless transceiver core coupled to the cellular radio core; and a digital portion integrated on the substrate including the host processor and the reconfigurable processor core. However, in the same field of art, Schmidt teach a circuit of a processor core which includes different processors (p. 15 l. 1-6), comprises a analog portion integrated on a substrate (Schmidt, claim 1) the analog portion including:

a cellular radio core; a radio sniffer coupled to the cellular radio core; a short range wireless transceiver core coupled to the cellular radio core; (Schmidt, page 6 claim 1)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Hammond and Schmidt in order to allow users to move freely between cells while transparently maintaining all connections (see ^{p.3 and} Background ~~cap~~ p.42).

As to claim 5, all limitations of claim 4 are listed with further: the reconfigurable processor core adapted to handle a plurality of wireless communication protocols (Schmidt, paragraph 6).

As to claim 6, all limitations of claim 4 are listed with further: a memory array core coupled to the reconfigurable processor core (Schmidt, F. 1 memory 170, p. 14).

As to claims 7-15, all limitations of claim 5 are listed with further limitations in page 6 of Schmidt (Schmidt, page 6 claims 2-10).

As to claim 18, all the same elements of Claim 5 are listed, but in system form rather than method form. Therefore, the supporting rationale of the rejection to Claim 5 applies equally as well to Claim 18.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dean Phan whose telephone number is (571) 270-1002. The examiner can normally be reached on Mon - Thu; 9:30AM - 5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


KIM HUYNH
SUPERVISORY PATENT EXAMINER

2/5/07